APPLICATION NO.: 10/691,705

Attorney Docket No.: ST3001-0031

Preliminary Amendment

IN THE SPECIFICATION

Immediately after the title on page 1, please insert the following new paragraph:

This application claims priority of Japanese patent application No. JP 2003-162112 filed on June 6, 2003 and Japanese patent application No. JP 2003-273963 filed on July 14, 2003.

Please replace the paragraph starting at line 33 of page 2 and continuing to line 10 of page 3 with the following new paragraph:

As specific means for solving the above conventional problems, the present invention provides an optical semiconductor device, which eomprises can include an optical semiconductor chip sealed in a surrounding soft resin; a holder formed around the soft resin and integrally with a lead frame; and a covering lens composed of a transparent resin harder than the soft resin. The holder has an aperture configured to relieve a state of hermetic sealing for the soft resin and formed in a direction that imposes no optical influence on a function of the optical semiconductor chip. In the optical semiconductor device, the lead frame may protrude into the aperture of the holder so as to occupy an inner rim of the aperture at a ratio below ½ in length. Thus, the present invention can solve the above problems by improving reliability without deterioration of performance.

Please replace the paragraph located at lines 11-19 of page 5 with the following new paragraph:

In the present invention, the soft resin 3 such as a silicone resin is <u>can be</u> injected through the aperture 7b and, after degassing, heated to achieve an appropriate hardness. Such <u>the</u> processes <u>can</u> produce the construction of the present invention. <u>It comprises The construction can include</u> the soft resin 3 formed to surround the whole optical semiconductor chip 2 and the hard resin 4 (the lens 6 and the holder 7) formed to surround the soft resin 3 except for the aperture 7b where the optical semiconductor chip 2 does not function.

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Please replace the paragraph starting at line 32 of page 5 and continuing to line 5 of page 6 with the following new paragraph:

In the present invention, as shown in Fig. 3, the inner rim of the holder 21, which forms the aperture 23, can include includes portions (parts of the bold line in Fig. 3) where the lead frame 22 contacts the inner wall of the holder 21. Reducing these portions to be as small as possible is effective to reduce an interface between the lead frame 22 and the holder 21 to prevent production of bubbles. The effect can be confirmed when the lead frame 22 partly contacts the inner wall of the holder in length in the circumferential direction at a ratio below about ½ the length of the inner rim in the holder 21 shown in Fig. 3.

Please replace the paragraph at lines 9-27 of page 7 with the following new paragraph:

As described above, the optical semiconductor device according to the present invention comprises can include an optical semiconductor chip sealed in a surrounding soft resin; a holder composed of a hard resin harder than the soft resin and formed around the soft resin and integrally with a lead frame; and a covering lens composed of a transparent resin. The holder has an aperture configured to relieve a state of hermetic sealing for the soft resin and formed in a direction that imposes no optical influence on a function of the optical semiconductor chip. In the optical semiconductor device, the lead frame protrudes into the aperture of the holder so as to occupy an inner rim of the aperture at a ratio below ½ in length. Therefore, on formation of a highly reliable optical semiconductor device double sealed with soft and hard resins, the double sealing can be achieved without providing any space that loses reliability. Thus, an extremely superior effect can be expected to improve performance without a loss in amount of the light emitted from or coming into the optical semiconductor chip.